

CHAPTER 2 HUMAN ENVIRONMENT

As part of the scoping and environmental analysis conducted for the project, the following environmental issues were considered but no adverse impacts were identified. Consequently, there is no further discussion regarding these issues in this document.

- Growth
- Population and Housing
- Public Services
- Parks and Recreational Facilities
- Mineral Resources
- Noise
- Paleontology

In addition to information presented here, the analysis in these chapters is also based on supporting technical studies and other reference materials not attached to this document. A list of these appears in Appendix E. They are available for examination and copying at the following address: California Department of Transportation, District 4, Office of Environmental Analysis, 111 Grand Avenue, Oakland California, 94623-0660; telephone (510) 286-6198 (Voice), or use the California Relay Service TTY number, 1-887-735-2929.

2.1 LAND USE

2.1.1 EXISTING AND FUTURE LAND USE

2.1.1.1 Regulatory Setting

Most of the project area is in unincorporated parts of Sonoma County. The easternmost half-mile of the project extends into the city of Cotati. The Sonoma County Zoning Regulations are the guidance document for land-use planning in Sonoma County. The equivalent document for the City of Cotati is Title 17 of the Cotati Municipal Code.

2.1.1.2 Affected Environment

Land use within the unincorporated Sonoma County section of the project area (defined here as those parcels adjoining SR-116 in areas where work will occur beyond the current edge of pavement) is roughly half rural residential parcels, thirty percent agricultural, and ten percent limited commercial. The remainder is parcels with split uses (about ten percent) and other uses (less than one percent). For a map of land use in the project area, see Appendix F.

The land use in the half-mile section at the eastern end of the project in the City of Cotati is “Commercial, Gravenstein Corridor”. This is a mixed-use classification for retail and service uses that is applied to both sides of the Gravenstein Highway from Highway 101, west to the city limits.

Over the past seven years there has been very little development in Sonoma County along SR-116 between Sebastopol and Cotati. With the exception of the recycling center at 7085 Highway 116 South, these use permits do not appear to represent major development in the SR-116 corridor.

In the City of Cotati, the major development in the project vicinity is the Cotati Commons complex, consisting of a Lowe’s Home Improvement Store, approximately 75,100 square feet of additional commercial space, 39,750 square feet of office space, and 48 residential units.

2.1.1.3 Impacts

Sonoma County has limited amounts of Limited Commercial (LC) zoning, the purpose of which is to facilitate the provision of retail and similar services to rural residents. Caltrans would buy and clear several LC parcels. This would temporarily reduce the County’s stock of LC-zoned land. A few parcels may, given limits on lot coverage, be too small for construction with proper setbacks after the project is constructed.

When Caltrans completes the project and sells the excess parcels at Lone Pine/Mount Vernon, several small but buildable LC parcels will again be available for the use of those who may wish to establish local, small-scale service-oriented businesses. Caltrans may elect to use undersized parcels for drainage features, such as a retaining ponds.

2.1.1.4 Avoidance, Minimization and/or Mitigation Measures

None proposed.

2.1.2 CONSISTENCY WITH STATE, REGIONAL AND LOCAL PLANS

2.1.2.1 Santa Rosa Plain Conservation Strategy

The Santa Rosa Plain is located in central Sonoma County, bordered on the south and west by the Laguna de Santa Rosa, on the east by the foothills, and on the north by the Russian River. The plain and adjacent areas are characterized by vernal pools, seasonal wetlands, and associated grassland habitat. These support the California tiger salamander (CTS), of which the Sonoma population is listed as endangered, and four endangered plant species.

The US Fish and Wildlife Service (USFWS) worked with other agencies and municipalities to develop a conservation strategy for the Santa Rosa Plain that conserves and enhances the habitat for the CTS and the listed plants, while considering the need for development pursuant to the general plans of the local jurisdictions. Santa Rosa Plain Conservation Strategy (SRPCS) is the guidance document resulting from that effort. The SRPCS defines the boundaries of the region, the survey methodologies, and compensation ratios, and mandates the process for evaluating effects to

the CTS and plant species that occur for all projects that fall within the vicinity of the Santa Rosa Plain. The discussion of biology in this document is consistent with the SRPCS.

2.1.2.2 General and Community Plans (both City and County)

The Sonoma General Plan designates SR-116 in the project area as a Primary Arterial road. A Primary Arterial road carries large volumes of traffic over long distances. SR-116 within the project area consists of one lane in either direction and is a Roadway Improvement Category “B” on the Highway and Transit Plan General Map of the General Plan Circulation Element. The category means that the intent is to widen for continuous turn lanes, widen bridges, and improve intersections. The Circulation Element also designates SR-116 in the project area as an existing intercity transit route for Sonoma County Transit and Golden Gate Transit. In providing operational improvements and bus pads, the proposed project conforms fully to the provisions of the General Plan.

The City of Cotati General Plan calls for improvements to be made at the Gravenstein Highway/ Madrone/Locust Avenue intersection(s) pursuant to the recommendations of the City Engineer and Caltrans staff.

2.1.2.3 Transportation Plans (RTPs and RTIPs)

State law requires each Regional Transportation Planning Agency (RTPA) to adopt and submit an updated Regional Transportation Plan (RTP) to the California Transportation Commission (CTC) and Caltrans every three years in urban regions and every four years in non-urban regions. The Metropolitan Transportation Commission (MTC) is responsible for the RTP that includes Sonoma County. MTC adopted the current plan, “Transportation 2030”, in 2005. The plan specifies a detailed set of investments and strategies throughout the region from 2005 through 2030 to maintain, manage and improve the surface transportation. Transportation 2030 includes project reference number 21998, “Rehabilitate and widen Route 116 from Elphick Road to Redwood Drive (involves realignment, new shoulders and channelization improvements),” to which the proposed project conforms.

2.1.3 FARMLANDS

2.1.3.1 Regulatory Setting

The National Environmental Policy Act (NEPA) and the Farmland Protection Policy Act (FPPA, 7 USC 4201-4209; and its regulations, 7 CFR Part 658) require federal agencies, such as FHWA, to coordinate with the Natural Resources Conservation Service (NRCS) if their activities may irreversibly convert farmland (directly or indirectly) to nonagricultural use. For purposes of the FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance.

The California Environmental Quality Act requires the review of projects that would convert Williamson Act contract land to non-agricultural uses. The main purposes of the Williamson Act are to preserve agricultural land and to encourage open space preservation and efficient urban

growth. The Williamson Act provides incentives to landowners through reduced property taxes to deter the early conversion of agricultural and open space lands to other uses.

2.1.3.2 Affected Environment

In Sonoma County, grazing and rangeland agricultural uses, such as those found within the project area, have been steadily decreasing in favor of low-density rural residential uses and vineyards. The parcels in the project area that are zoned agricultural are used for these forms of dryland agricultural activity and for vineyards.

2.1.3.3 Impacts

As of the date of this document, Caltrans has identified potential acquisition of approximately 1.2 acres of farmlands as identified by Sonoma County zoning designations, all partial sections of parcels. The majority of this is grazing land. Although approximately 0.1 acres are farmland of statewide importance as determined by the California Department of Conservation (CDC), the US Natural Resources Conservation Service has determined that none of this land is unique or of statewide importance due to lack of irrigation (see Appendix H). Partial acquisition of three parcels under Williamson Act contracts identified by the Sonoma County Recorder's Office would result in approximately 0.7 acres of farmland under contract being converted to transportation use.

Although design refinements may further reduce the project footprint, impacts to Williamson Act Contract lands cannot be avoided completely because no other space exists for the planned improvements other than the areas bordering the current right-of-way without compromising roadway operational quality. Based on this consideration, Caltrans has determined that use of other non-contract land is not reasonably feasible for the proposed project.

2.1.3.4 Avoidance, Minimization and/or Mitigation Measures

None proposed. Depending upon the recommendations of the CDC, Caltrans may elect to compensate for the loss of agricultural land by purchasing agricultural conservation easements in Sonoma County.

2.2 COMMUNITY IMPACTS

2.2.1 COMMUNITY CHARACTER AND COHESION

2.2.1.1 Regulatory Setting

The National Environmental Policy Act of 1969 as amended (NEPA), established that the federal government use all practicable means to ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings [42 USC 4331(b)(2)]. The Federal Highway Administration in its implementation of NEPA [23 USC 109(h)] directs that final decisions regarding

projects are to be made in the best overall public interest. This requires taking into account adverse environmental impacts, such as, destruction or disruption of human-made resources, community cohesion and the availability of public facilities and services.

Under the California Environmental Quality Act, an economic or social change by itself is not to be considered a significant effect on the environment. However, if a social or economic change is related to a physical change, then social or economic change may be considered in determining whether the physical change is significant. Since this project would result in physical change to the environment, it is appropriate to consider changes to community character and cohesion in assessing the significance of the project's effects.

2.2.1.2 Affected Environment

Most of the project area has been shielded to some extent from the rapid development in other nearby areas of Sonoma County because the pressure to develop has coincided with an increase in environmental-regulatory restrictions that make development more difficult. As a result, existing uses in the central part of the project area give the appearance of having slowly accumulated over time rather than having all been recently established, as is the case in the part of Cotati that adjoins the project area, where the Commons project is located.

SR-116's community history is reflected in its marked heterogeneity of land uses and by the ages and character of structures, with the rural character still predominant. Many older buildings are used by retail businesses, in particular antique shops. Several unassuming buildings are occupied by businesses of long standing, such as the Sequoia Drive-In restaurant in the western project area and Red's Recovery Room at the project's eastern terminus. These and other established businesses in the project area are largely responsible for maintaining the character of the area.

Businesses in the unincorporated Sonoma county portion project area are zoned LC (see section 2.1.1.3), which includes small neighborhood retail businesses and similar uses that help maintain the self sufficiency of local rural or urban neighborhoods or communities while remaining in keeping with community character.

2.2.1.3 Impacts

The project will increase physical community cohesion. The addition of traffic signals will make pedestrian crossing of SR-116 easier, and bus pads and wider road shoulders will increase community mobility options.

Community character will be affected visually by the expansion of Caltrans' right of way, a topic which is addressed in section 2.5 of this document (Visual/Aesthetics). Parking for local businesses will be impacted by the expansion of the right-of-way, addressed in Business Relocations, below.

For a principally commercial section of the project area approximately from west of Stony Glen Lane to west of Washoe Creek, all construction activity will be contained within the current edge of pavement, and the only impacts from the project in this section will be temporary construction

impacts. For temporary impacts from construction activities, such as noise and dust, please see section 4.1.

Relocation impacts are addressed in section 2.2.2. Other than these considerations, Caltrans does not anticipate any adverse affects on community character.

2.2.1.4 Avoidance, Minimization and/or Mitigation Measures

None proposed.

2.2.2 RELOCATIONS

2.2.2.1 Regulatory Setting

Caltrans's Relocation Assistance Program (RAP) is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (as amended) and Title 49 Code of Federal Regulations (CFR) Part 24. The purpose of RAP is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole. Please see Appendix D for a summary of the RAP.

All relocation services and benefits are administered without regard to race, color, national origin, or sex in compliance with Title VI of the Civil Rights Act (42 USC 2000d, et seq.). Please see Appendix C for a copy of Caltrans's Title VI Policy Statement.

Parking required for uses zoned Limited Commercial is set forth at Article 86 of the Sonoma County Zoning Regulations. General retail business, except as otherwise specified in the article, are required to provide one space parking space per 200 square feet of floor area, plus one bicycle parking space per five spaces of required automobile parking. A portion of the required parking spaces is to be provided for disabled persons consistent with state and federal law.

2.2.2.2 Affected Environment

There are commercial as well as residential properties adjacent to or partially within the project area. The structures on these properties were generally constructed when SR-116 in the project area was a rural road and not yet a major arterial, and are often in close proximity to Caltrans's existing right-of-way.

2.2.2.3 Impacts

Business relocations

Where Caltrans' right-of-way would be expanded for this project, Caltrans must acquire additional property, but most of this can be accomplished by sliver acquisitions, or the acquisition of long, narrow sections of the parcels that front the road. Caltrans would acquire entire parcels where the project would cause the current use of the parcel no longer to be viable. Where businesses would

be put out of compliance with local zoning codes by the loss of parking, Caltrans would also acquire the entire affected parcel. Caltrans anticipates approximately seven business relocations.

For the locations which Caltrans has tentatively identified as likely to be acquired, the present uses are at best of limited utility for the provision of services useful for the daily self-sufficiency of the neighborhood, and the buildings have no particular historical value. However, they do contribute to the character of the area through their age and the diversity of businesses that occupy them.

The loss of these structures and the relocations of these businesses would not constitute a significant impact on the community. These buildings represent only a small percentage of the built environment in the project area. Excess parcels large enough to be viable after the project has been constructed will then be available for new construction.

Residential Relocations

As of April 2007, Caltrans found 68 residences listed for sale and rent in the immediate area. The projected number of households potentially displaced as of this date is approximately 16.

Cost of Relocations

Caltrans has made a preliminary right-of-way purchase cost estimate for this project of \$31.0 million.

2.2.2.4 Avoidance, Minimization and/or Mitigation Measures

All persons displaced by the purchase of their residences by Caltrans will be contacted by a Caltrans Relocation Agent, who will ensure that eligible displacees receive their full relocation benefits without discrimination. Caltrans has two programs to aid businesses and non-profits which must relocate: the Relocation Advisory Assistance Program, and the Relocation Payments Program. For those commercial parcels that lose parking but with sufficiently small lot coverage to allow for the placement of new parking elsewhere on the lot, Caltrans would compensate landowners for the cost of providing new parking. The acquisition and relocation program will be conducted in accordance with the Uniform Relocation and Acquisition Policies Act of 1970, as amended.

2.2.3 ENVIRONMENTAL JUSTICE

2.2.3.1 Regulatory Setting

All projects involving a federal action (funding, permit, or land) must comply with Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, signed by President Clinton on February 11, 1994. This Executive Order directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Low

income is defined based on Department of Health and Human Services poverty guidelines. For 2007, this was \$20,650 for a family of four.

All considerations under Title VI of the Civil Rights Act of 1964 and related statutes have also been included in this project. Caltrans's commitment to upholding the mandates of Title VI is evidenced by its Title VI Policy Statement, signed by the Director, which can be found in Appendix C of this document.

2.2.3.2 Affected Environment

Employment in Sonoma County has remained somewhat steady over the last few years and reached a record high in 2005. Unemployment levels have followed statewide trends, while labor force data indicates steadier monthly unemployment trends than other Northern California counties throughout the year. Job growth, the amount of new housing, and taxable sales continue to rise (Sonoma County 2006-07 Economic and Demographic Profile, Sonoma County Economic Development Board).

According to the 2000 Census, the residents of the project area (defined by the census blocks adjoining SR-116 adjoining SR-116 in areas where work will occur beyond the current edge of pavement) are primarily white, with small numbers of ethnic minorities. The project area's population is on average about ten percent Hispanic/Latino. Just over ten percent of the population is over the age of 65, of whom two-thirds live in family households. The average household size is about 2.5 people.

No clusters or enclaves of these ethnic minorities have been identified, either through demographic information or direct observation. Several census blocks have significant percentages of Hispanic/Latino residents (20-35%), but these blocks are small (8-39 residents) and scattered throughout the project area.

Household incomes in the project area (defined by the census block groups adjoining SR-116, which are larger areas than the individual census blocks) are varied, representing a wide range of income classes.

2.2.3.3 Impacts

There is no indication that any disadvantaged group bears a significantly disproportionate share of permanent project impacts. Based on the above discussion and analysis, no minority or low-income populations have been identified that would be adversely affected by the proposed project as determined above. Therefore, this project is not subject to the provisions of E.O. 12898.

2.2.3.4 Avoidance, Minimization and/or Mitigation Measures.

None proposed.

2.3 UTILITIES / EMERGENCY SERVICES

2.3.1 Utilities

2.3.1.1 Affected Environment

There are overhead utilities, underground gas, electric and telecommunications lines, underground sewer and water supply lines in the project area.

2.3.1.2 Impacts

The proposed project would affect the area's utility lines. However, utilities would be relocated without an interruption in service.

The proposed project would not place any additional demand on utilities in the area, nor would it require new water supplies to service the project. (Sonoma County does not have centralized stormwater treatment facilities; treatment of stormwater is otherwise discussed in section 3.1).

2.3.1.3 Avoidance, Minimization and/or Mitigation Measures

None proposed.

2.3.2 Emergency Services

Some temporary impacts to emergency response time may occur as part of traffic control during construction. Please see Construction Impacts, Section 4.1, below.

2.4 TRAFFIC & TRANSPORTATION/PEDESTRIAN AND BICYCLE FACILITIES

2.4.1 Regulatory Setting—General

The Federal Highway Administration (FHWA) directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of federal-aid highway projects (see 23 CFR 652). It further directs that the special needs of the elderly and the disabled must be considered in all federal-aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility.

Caltrans and FHWA are committed to carrying out the 1990 Americans with Disabilities Act (ADA) by building transportation facilities that provide equal access for all persons. The same degree of

convenience, accessibility, and safety available to the general public will be provided to persons with disabilities.

Caltrans Director's Policy DP-27 states that Caltrans recognizes and supports the concept and implementation of Bus Rapid Transit as a potentially cost-effective strategy to maximize people throughput (emphasizing the movement of people, not just vehicles), reduce traveler delay, increase capacity, and foster energy savings on the California State Highway System, as well as on local highways.

Caltrans Deputy Directive DD-64 states that Caltrans fully considers the needs of non-motorized travelers (including pedestrians, bicyclists and persons with disabilities) in all programming, planning, maintenance, construction, operations and project development activities and projects.

The Sonoma General Plan designates SR-116 in the project area as a Primary Arterial road (see section Consistency With State, Regional And Local Plans). The section of SR-116 in the project area from the intersection with Alder to the intersection with Madrone is an existing Class II bikeway under the SCTA Countywide Bicycle Plan 2003 Update. (A Class II bikeway is a designated bike lane on a traveled way shared with motor vehicles. For the distinctions between different classes of bikeways, please see the Caltrans design standards at <http://www.dot.ca.gov/hq/oppd/hdm/pdf/english/chp1000.pdf>). It is also included in the 2001 Regional Bicycle Plan for the Bay Area in the Metropolitan Transportation Commission's Regional Transportation Plan for the San Francisco Bay Area. In both documents, the remainder of SR-116 in the project area is identified as a proposed Class III bikeway, in which bicycles share the roadway with pedestrians and motor vehicles without a separate designated lane.

2.4.2 Motor Vehicle Traffic

2.4.2.1 Affected Environment

Although SR-116 is located in rural Sonoma County, SR-116 functions as a major east-west commute corridor. Traffic volumes for the current year on SR-116 vary from intersection to intersection, ranging from about 17,500 to 22,300 vehicles on an average day. By 2030, these figures are expected to increase by about fifteen percent.

2.4.2.2 Impact

The proposed project will rehabilitate the roadway pavement and includes shoulder widening, left turn channelization, signalization, and culvert improvements. The project does not propose any congestion relief improvements such as additional through lanes, and will not increase traffic and capacity.

During the construction period, there will be construction activity that would require traffic controls such as temporary lane closures. For a discussion of temporary construction impacts to traffic, refer to section 4.1.

2.4.2.3 Avoidance, Minimization

None proposed.

2.4.3 Bicycle Traffic

2.4.3.1 Affected Environment

SR-116 is a rural highway with shoulders measuring from 0.0 to 2.4 meters (0.0 to 8.0 feet). Bike lane signs and pavement markings demarcate the section of SR-116 that is an established Class II bikeway. The remaining section has shoulder markings only to indicate the fogline.

Caltrans design standards require a minimum of 1.2-meter (four-foot) shoulders for Class II bikeways on highways without gutters where parking is prohibited.

2.4.3.2 Impact

By providing 2.4-meter (eight-foot) shoulders, the proposed project would increase bicyclists' confidence that motor-vehicle traffic would not stray into their path of travel, and motor vehicle operators will be less apt to swerve into oncoming traffic in order to make certain that they will not hit cyclists. The construction of 2.4-meter shoulders would not prevent the application of future bikeway designations. During the construction period, there would be construction activity that would require traffic controls such as temporary lane closures. For a discussion of temporary construction impacts to bicycle traffic, refer to section 4.1.

2.4.3.3 Avoidance, Minimization and/or Mitigation Measures

None proposed.

2.4.4 Mass Transit

2.4.4.1 Affected Environment

Sonoma County Transit (SCT) provides bus service seven times a day in each direction between Sebastopol and Rohnert Park. Two school bus routes, one serving elementary schools and the other serving high schools, also use SR-116 in the project area twice a day.

2.4.4.2 Impacts

The project will provide bus pads that would allow SCT to expand service in the area. Operational improvements to the roadway would benefit all bus traffic. There would be no negative impacts on bus traffic from this project.

2.4.4.3 Avoidance, Minimization and/or Mitigation Measures

None proposed.

2.5 VISUAL RESOURCES

2.5.1 Regulatory Setting

The National Environmental Policy Act of 1969 as amended (NEPA) establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and *aesthetically* (emphasis added) and culturally pleasing surroundings [42 U.S.C. 4331(b)(2)]. To further emphasize this point, the Federal Highway administration in its implementation of NEPA [23 U.S.C. 109(h)] directs that final decisions regarding projects are to be made in the best overall public interest taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

Likewise, the California Environmental Quality Act (CEQA) establishes that it is the policy of the state to take all action necessary to provide the people of the state “with...enjoyment of *aesthetic*, natural, scenic and historic environmental qualities.” [CA Public Resources Code Section 21001(b)]

At the local-government level, the entire SR-116 corridor from US 101 to the coast has been identified as a scenic corridor under the Sonoma County General Plan Open Space Element. Caltrans maintains a process for highways to be assigned official State Scenic Highway designation at the request of local governments that begins with an evaluation of eligible highways to determine if they meet certain required criteria. SR-116 in the project area is listed as an eligible State Scenic Highway, but the process of review for designation has not been initiated or requested.

The FHWA Visual Impact Assessment methodology characterizes visual impact in terms of project-related change to existing visual quality of the setting, based upon vividness, intactness, and unity, and in relation to the level of visual sensitivity of potential receptors. For more information on this methodology, the FHWA publication *Visual Impact Assessment for Highway Projects* (FHWA-HI-88-054) may be downloaded from <http://www.dot.ca.gov/ser/downloads/visual/FHWAVisualImpactAssmt.pdf>.

2.5.2 Affected Environment

Despite the prevalence of rural residential and roadside commercial land uses, the principal image types in the wider project setting continue to include agriculture and open space. Pasture, small-scale farming, and vineyards are now the principal forms of agriculture in the project corridor. Intactness, unity and vividness of this rural landscape remain moderately high in the general project vicinity. From the perspective of off-road viewpoints, visual quality of the landscape of the project corridor remains moderately high.

From the highway throughout much of the project corridor, agricultural and open space image types are visible to only a limited degree in constrained views. While the area potentially visible from the highway is extensive based only on terrain, roadway edge conditions in much of the project corridor are highly filtered or completely screened by landscaping, fencing, and buildings at the roadside. As a result, the long, scenic or panoramic vistas that may have once existed and accounted for the highway’s County scenic identification are now few and limited. However, the

Sonoma general plan identification is assumed to reflect community values associated with the appearance of this section of SR-116, and so viewer sensitivity is assumed to be moderately high.

Residents of homes adjoining the highway are presumed to have high visual sensitivity to the highway, a fact reflected in the nearly universal roadside screening installed by residents. Roadside businesses on the other hand would have moderate sensitivity. In general, existing roadside businesses have attempted to maximize exposure to the highway and would tend to be less concerned with screening views of the highway and more with increasing their visibility from the highway.

2.5.3 Project Landscape Segments

2.5.3.1 Roadside Residential/Commercial Segment

This segment, extending from the project end point at Cooper Road near the Sebastopol city limit to the vicinity of Hessel Road South, is characterized by the predominance of relatively small parcels showing a succession of varying frontage treatments that lack visual unity, alternating between unscreened commercial frontages with exposed roadside parking to completely screened residences with a wide variety of fencing and generally non-native landscaping treatments. The corresponding highway edge condition of nearly continuous screening at the shoulder results in highly constrained, directed views for the roadway user.

In the majority of instances, residences are screened from the glare and noise of the highway by fencing, shrubs and tree plantings. This screening has replaced views of rural open space and woodland with a developed foreground image of moderate or moderately low vividness and inherently low unity. Visual quality of this landscape segment is also strongly and adversely affected by highly prominent utility poles and cable lines, located within the highway right-of-way through most of the segment.

In contrast, three creeks (Jersey, Blucher, and the unnamed drainage at Llano Road), characterized by thick willow riparian forest, cross the project corridor in this segment, contributing strong, isolated elements of high vividness and intactness. In addition, a number of noteworthy specimens of large valley oak are found at various locations on the roadway edge in this particular landscape segment. Visual quality of this segment is moderate to low overall, but is highly variable from place to place, and includes portions that retain high scenic quality.

2.5.3.2 County Scenic Landscape Segment

This segment extends roughly from Hessel Road South to a short distance east of Stony Point Road, a segment corresponding approximately to a Scenic Landscape Segment in the Sonoma County General Plan Open Space Element. This segment is dominated by scenic agriculture, open space and woodland, in which large parcels with few people and no public access mean that available views to the road are few. Views of distant mountains and scenic vistas of the rural landscape remain prominent from the road as well as off the road, although views are sometimes constrained by roadside screening.

Figure 2-1 Typical existing frontage

Extensive, highly variable, predominantly non-native landscape screening; fully screened or highly filtered roadway edge conditions.



Figure 2-2 Typical condition after widening

Exposed views of rural residences and other man-made structures and introduced landscaping; background view of hills, pasture, and woodland exposed.



Figure 2-3 Condition after impact minimization

Shrub planting (standard replacement landscaping and/or native plants) in Caltrans's right-of-way; voluntary fence and landscaping replacement by owners on private property.



Typical effects of roadway widening and ditch relocation on frontages of residences adjacent to the roadway (section 2.5.4)

Vividness and unity of panoramic views of agricultural fields and undeveloped hillsides are moderately high. Intactness of the agricultural landscape is also moderately high. Even where utilitarian and industrial facilities are visible, these are agriculture-related and evocative of the idea of the agricultural landscape reflected in the Sonoma General Plan Scenic Highway identification. For these reasons, sensitivity for all viewers is considered to be moderately high.

2.5.3.3 Cotati Urbanizing/Light Industry

This short segment from a short distance east of Stony Point Road to the start of the project at Alder Lane is typified by light-industrial and commercial uses adjoining the highway shoulder. Although views of agricultural open space and views of the Sonoma Mountains are visible from this segment, visual character is strongly dominated by the roadside commercial and light industrial uses and their visually chaotic quality. The unit adjoins the intensively urbanizing US-101 corridor of Cotati.

Overall visual quality of this segment is moderately low, and viewer sensitivity in this segment is considered to be moderately low. Despite the County Scenic Corridor designation, viewer's scenic expectations in this portion of the highway would not be high but, rather, are conditioned by the generally poor existing visual quality of the setting and its proximity to the highly urbanized US-101 corridor.

One roughly 300-meter (984-foot) portion of this segment, representing a remnant of the region's rural agricultural landscape, remains on the highway's south side beginning a short distance east of Madrone Avenue. This pocket of rural landscape includes mature oak trees and views of undeveloped hillsides and pasture, and retains a moderately high level of visual quality.

2.5.4 Impacts

Throughout the project area, the visual dominance of the highway would increase due to widening, intersection realignment, the introduction of signalization, barriers, and retaining walls, and other project features in views to or from the road. The principal visual impacts of the proposed project would result from clearing of fencing and vegetation in connection with proposed shoulder improvements (see figures 2-1 through 2-3). Adjoining residences would have increased exposure to views of the road and to headlight glare. However, for long, scenic or panoramic views from the roadway in the County Scenic Landscape Segment (see 2.5.3.2) that currently are occluded by vegetation, the removal of scrub trees and similar ruderal vegetation could constitute a positive effect.

Visual impacts could result from safety barriers required atop segments of downslope retaining walls. Caltrans places vehicular barriers where necessary to retain and redirect errant vehicles. The standard solid concrete barrier types that are for general use next to traffic obstruct views of scenic areas, are highly urban in character, and would be highly conspicuous against the predominantly rural backdrop of the project corridor.

2.5.5 Avoidance, Minimization and/or Mitigation Measures

Where screening vegetation between residences and the roadway is lost, Caltrans will plant screening vegetation where the constraints of Caltrans' right-of-way boundaries and biological constraints allow. Large, noteworthy native trees near the roadway, such as the two large specimen

trees at the historic Enmanji Temple grounds, will be preserved. Metal-beam guard rail (MBGR) may be placed around these trees as required for safety.

To prevent view obstruction and reduce potentially adverse effects on the visual character and quality of the corridor, Caltrans will use less visually intrusive MBGR throughout the County Scenic Landscape Unit, except in those places where its use would expand the environmental footprint of the project, as MBGR requires more space than a solid concrete barrier in order to provide sufficient room for safe maintenance. The shoulder under and behind the MBGR will be surfaced to inhibit the growth of weeds. Where footprint expansion will make the use of MBGR infeasible, Caltrans will use railing designs that are less obtrusive and more transparent than standard barriers, or solid barriers to which aesthetic treatments will be applied.

MBGR will also be used in those sections of the Roadside Residential/Commercial Segment (see 2.5.3.1) where standard concrete barriers will otherwise adjoin sensitive residential receptors, roadway frontage with high existing visual quality, and frontage of the historic Llano Road House, except where this will expand the environmental footprint. The precise locations of the various railing types will be determined during final project design.

MBGR, non-standard railings, or aesthetically treated solid barriers will also be used where safety barriers are required within the scenically intact rural portion of the Cotati segment (see 2.5.3.3) east of Madrone Avenue.

2.6 CULTURAL RESOURCES

2.6.1 Regulatory Setting

2.6.1.1 Identification of Historic Properties

“Cultural resources” as used in this document refers to all historical and archaeological resources, regardless of significance. Laws and regulations dealing with cultural resources include:

The National Historic Preservation Act of 1966, as amended, (NHPA) sets forth national policy and procedures regarding historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for the National Register of Historic Places. Section 106 of NHPA requires federal agencies to take into account the effects of their undertakings on such properties and to allow the Advisory Council on Historic Preservation the opportunity to comment on those undertakings, following regulations issued by the Advisory Council on Historic Preservation (36 CFR 800). On January 1, 2004, a Section 106 Programmatic Agreement (PA) between the Advisory Council, FHWA, State Historic Preservation Officer (SHPO), and the Department went into effect for Department projects, both state and local, with FHWA involvement. The PA implements the Advisory Council’s regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to the Department. The FHWA’s responsibilities under the PA have been assigned to the Department as part of the Surface Transportation Project Delivery Pilot Program (23

CFR 773) (July 1, 2007). Properties found eligible under Section 106 are consequently considered historical resources under CEQA.

The Archaeological Resources Protection Act (ARPA) applies when a project may involve archaeological resources located on federal or tribal land. ARPA requires that a permit be obtained before excavation of an archaeological resource on such land can take place.

Historical resources are considered under the California Environmental Quality Act (CEQA), as well as California Public Resources Code (PRC) Section 5024.1, which established the California Register of Historical Resources. PRC Section 5024 requires state agencies to identify and protect state-owned resources that meet National Register of Historic Places listing criteria. It further specifically requires the Department to inventory state-owned structures in its rights-of-way. Include the following sentence as applicable. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the State Historic Preservation Officer (SHPO) before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the National Register or are registered or eligible for registration as California Historical Landmarks.

The National Register is the official inventory of the nation's historic places that are worthy of preservation. The evaluation criteria include: an association with events that have made a significant contribution to the broad patterns of our history (Criterion A); an association with the lives of persons significant in our past (Criterion B); that embody distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values (Criterion C); that have yielded, or may be likely to yield, information important in prehistory or history (Criterion D). If there is the potential for causing effects to historic properties, the agency must determine the scope of appropriate identification efforts and then proceed to identify historic properties in the area of potential effects, or APE.

After completion of identification efforts, the agency, in consultation with the SHPO (State Historic Preservation Officer), or THPO (Tribal Historic Preservation Officer), makes an assessment of effects on the identified historic properties based on the adverse effect criteria found in the Advisory Council on Historic Preservation's (ACHP) regulations found at 36 CFR 800. If they agree that there will be no adverse effect, the agency proceeds with the undertaking and any agreed-upon conditions. If they agree that there will be an adverse effect, the agency begins consultation to seek ways to avoid, minimize or mitigate the adverse effects.

2.6.2 Affected Environment

2.6.2.1 Architectural Resources

Two historic properties are located within the Architectural Area of Potential Effect (APE) for the proposed project. One property, the Llano House, located at 4353 Gravenstein Highway South (APN: 062-070-042), was listed on the National Register on May 22, 1978, at the local level of significance. Although the original nomination did not specify under which criterion the property was eligible, eligibility under Criterion C was inferred. The period of significance was determined to be 1850-1880. The National Register boundaries are the current limits of the Sonoma county assessors parcel.

In the course of survey for the project, a Historic Property Survey Report and its appendix, the September 2006 Historic Resources Evaluation Report (HRER), considered sixty-seven previously unevaluated architectural resources within the APE. Of those, one property, the Enmanji Buddhist Temple, located at 1200 Gravenstein Highway South (APN: 060-140-063), was determined eligible for the National Register at the local level of significance under Criterion C, as a fine example of a Japanese Buddhist temple built in the Eclectic style of the late Kamakura period. The period of significance is 1933-1934. The National Register boundaries consist of the footprint of the temple structure. The above-mentioned Llano House was furthermore re-evaluated, confirming the resource is eligible under both National Register criteria A (early settlement patterns) and C (architecture and construction) at the local level of significance. Twenty-four of a total of ninety-one architectural resources in the project's APE had been previously evaluated and determined not eligible for listing in the National Register of Historic Places. The remaining sixty-five resources documented in the HRER were determined not eligible for the National Register.

On November 1, 2006, Caltrans received concurrence from SHPO regarding the eligibility of the Enmanji Temple and ineligibility for the National Register of the remaining sixty-five resources in the APE. The SHPO also concurred that the Llano House, in addition to being eligible under Criterion C, is also eligible under Criterion A. Both the Enmanji Temple and the Llano House are also considered historical resources for the purposes of CEQA.

2.6.2.2 Archaeological Resources

Eight previously-recorded archaeological sites (CA-SON-921, -1695, -517, -1807, -2360H (historic), -2358, -159, and -2359) were originally identified as within or adjacent to the project's Archaeology APE. Of these sites, two sites, CA-SON-159 and -1695, had been previously evaluated and determined eligible under Criterion D of the National Register. CA-SON-921 has been previously tested within the proposed project's area of direct impact (ADI); the portion of the site within the ADI has been determined to not contribute to the rest of the site, should the site ever be determined eligible for inclusion in the National Register. In the course of surveys for a 2006 Addendum Archaeological Survey Report for this project CA-SON- 517 was relocated as being outside the APE and CA-SON-2415 was identified was discovered within the APE, though not evaluated, because it was anticipated that impacts to the site could be avoided through protective measures.

If cultural materials are discovered during construction, all earth-moving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find.

If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). At this time, the person who discovered the remains will contact the District Environmental Branch so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

2.6.3 Impacts

2.6.3.1 Architectural Resources

There are two historic architectural properties in the APE, the Enmanji Temple, eligible for the NRHP, and the Llano House, listed in the NRHP. Although a sliver take from each parcel may be required, it has been determined that these minor takes will not remove, diminish, or alter the qualities and characteristics that contribute to the significance of either of these two properties. Therefore, neither property will be subject to adverse effects under Section 106 criteria, or significant impacts for the purposes of CEQA.

2.6.3.2 Archaeological Resources

Seven of the archaeological sites will be protected from construction impacts by temporary barriers. However, the project will result in an adverse effect under Section 106 to one archaeological site, CA-SON 1695 as a result of replacement of a culvert with a larger capacity (of flow) structure. Though further designs refinement may enable the effects to be minimized, Caltrans currently assumes the undertaking will result in an effect to the site, though these effects are unlikely to harm the site to the extent that it would no longer be eligible for listing in the National Register of Historic Places. Caltrans is currently preparing a Memorandum of Agreement (MOA) that will include a Treatment Plan.

2.6.4 Avoidance, Minimization and/or Mitigation Measures

The project will adversely affect one archaeological resource (CA-SON-1695). A Treatment Plan will be implemented in order to mitigate the adverse effect, per Section 106, to the significant components of the site through field methods, possible data recovery excavations, and curation of associated artifacts. This treatment will minimize impacts by providing new information on the site. Concurrently, following criteria outlined in the Treatment Plan, Caltrans will continue to consider non-standard design details that could further minimize impacts to the archaeological site.

If subsequent investigations show that the project has potential for impacts to cultural resources that cannot be mitigated below the threshold of significance, then Caltrans will reinitiate the environmental analysis process.